

Title (en)
FLOTATION TANK IMPELLER

Title (de)
RÜHRWERK FÜR FLOTATIONSBEHÄLTER

Title (fr)
AGITATEUR POUR RESERVOIR DE FLOTTATION

Publication
EP 0844911 B1 19991208 (EN)

Application
EP 96927781 A 19960814

Priority
• GB 9601984 W 19960814
• GB 9516873 A 19950817

Abstract (en)
[origin: WO9706892A1] An impeller for use with apparatus to enhance mixing of a gas and a liquid, as used for example in froth flotation apparatus, having a substantially upright portion (11) substantially parallel to the axis of rotation (17), and a plurality of vanes (12) extending outwardly therefrom, at least some of the vanes (12) having an upper part (19) adapted to induce liquid flow generally downwardly towards the impeller and a lower part (20) adapted to induce liquid flow generally upwardly towards the impeller, wherein the impeller further comprises barrier means (14) at least partially dividing the upper and lower parts, and a gas input situated on the same side of the barrier means (14) as the lower part (20). The barrier means (14) may comprise a flange like member in a plane generally perpendicular to the axis of rotation (17) and may intersect, or be integral with at least part of the vanes.

IPC 1-7
B03D 1/16; **B03D 1/20**; **B01F 3/04**; **B01F 15/00**

IPC 8 full level
B01F 3/04 (2006.01); **B01F 7/00** (2006.01); **B01F 15/00** (2006.01); **B03D 1/16** (2006.01)

CPC (source: EP US)
B01F 23/2331 (2022.01 - EP US); **B01F 23/23311** (2022.01 - EP); **B01F 23/23312** (2022.01 - EP); **B01F 23/23352** (2022.01 - EP); **B01F 23/23364** (2022.01 - EP); **B01F 27/0725** (2022.01 - EP US); **B01F 27/111** (2022.01 - EP US); **B01F 27/1125** (2022.01 - EP US); **B03D 1/1493** (2013.01 - EP US); **B03D 1/16** (2013.01 - EP US); **B01F 23/23311** (2022.01 - US); **B01F 23/23312** (2022.01 - US); **B01F 23/23352** (2022.01 - US); **B01F 23/23364** (2022.01 - US)

Cited by
ITVE20100017A1; AU2013281169A1; CN104470638A; EP2866943A4; AU2013281169B2; EP3395448A1

Designated contracting state (EPC)
DE ES FI FR GR IE SE

DOCDB simple family (publication)
WO 9706892 A1 19970227; AU 6748496 A 19970312; AU 702208 B2 19990218; CA 2229663 A1 19970227; CA 2229663 C 20050308; DE 69605557 D1 20000113; DE 69605557 T2 20000720; EP 0844911 A1 19980603; EP 0844911 B1 19991208; GB 2304297 A 19970319; GB 2304297 B 19990331; GB 9516873 D0 19951018; PL 181786 B1 20010928; PL 324989 A1 19980706; US 6308834 B1 20011030; ZA 966966 B 19980216

DOCDB simple family (application)
GB 9601984 W 19960814; AU 6748496 A 19960814; CA 2229663 A 19960814; DE 69605557 T 19960814; EP 96927781 A 19960814; GB 9516873 A 19950817; PL 32498996 A 19960814; US 1180198 A 19980409; ZA 966966 A 19960816